

REMARKS/DISCUSSION OF ISSUES

Claims 1-14 are pending in the application.

Claims are amended for non-statutory reasons: to correct one or more informalities, remove figure label number(s), and/or to replace European-style claim phraseology with American-style claim language. The claims are not narrowed in scope and no new matter is added.

35 U.S.C. § 103

The Office Action rejected: claims 1, 10, and 11 under 35 U.S.C. § 103 over Numao U.S Patent No. 5,103,328 ("Numao") in view of Weber et al. U.S Patent No. 5,686,979 ("Weber"); claims 2-5 over Numao and Weber further in view of Shinji JP-62-119518 (Shinji); and claims 6-9 and 12-14 in view of Numao, Weber, and Shinji further in view of Nauta et al. U.S. Patent Publication 2002/0030772 A1 (Nauta).

Claim 1

Among other things, the display device of claim 1 includes at least one reflective polarizer in an optical path between the backlight and the display panel.

The Office Action fairly admitted that Numao fails to disclose any such feature. However, the Office Action cited stated that Weber discloses a reflective polarizer. The Office Action also stated that: it would have been obvious to modify Numao to include Weber's reflective polarizer:

"for a switchable translector efficient in both a transmissive and reflective state that allows for use of at least 80% of available light for the LCD regardless of the light source and also for efficient use of a backlight and that improves battery life"

(citing Weber at col. 4, lines 9-16). In that regard, Applicants note that the cited text in Weber actually states that:

"The switchable transflector is efficient in both a transmissive and reflective state, allowing a transflective optical display of this invention to use of at least 80% of available light for illumination of the LCD regardless of the light source. Because of the transflector's efficiency, the backlight can be turned off under normal ambient light conditions in order to increase the life of the battery.

Weber at col. 4, lines 9-16.

Applicants respectfully traverse the proposed modification of Numao's device to add Weber's reflective polarizer, for at least the following reasons.

Applicants submit that the proposed motivation supplied above to add Weber's reflective polarizer to Numao's device is inapplicable to the device disclosed by Numao. Numao's device by its very nature employs the light source 19 to illuminate the shutter elements of the light shutter panel 21 individually and sequentially. Numao's device does not ever operate in an "ambient light" (e.g., reflective) mode. The addition of Weber's reflective polarizer to Numao's device would not produce a device that is "*efficient in both a transmissive and reflective state,*" or that would allow "*the backlight [to] be turned off under normal ambient light conditions in order to increase the life of the battery.*" Therefore, the cited prior art does not provide any motivation that would lead one of ordinary skill in the art to modify of Numao's device to add Weber's reflective polarizer.

Accordingly, there being no motivation found in the prior art that would lead one of ordinary skill in the art to modify of Numao's device to add Weber's reflective polarizer, Applicants respectfully request that the Examiner withdraw the rejection of claim 1 over any combination of Numao and Weber.

Claims 10-11

Claims 10 and 11 depend from claim 1 and are deemed patentable for at least the reasons set forth above with respect to claim 1.

Claims 2-5

Claims 2-5 all depend from claim 1. Applicants respectfully submit that Shinji

does not remedy the shortcomings of Numao as noted above.

Furthermore, Applicants respectfully traverse the proposed combination of Numao with Shinji. Shinji discloses a display device comprising a linear light source 1, a linear shutter array 2, a lens array 3, and a waveguide plate 4 comprising a plurality of waveguides arranged in a series of adjacent columns, each corresponding to one scanning line of an image to be displayed. Shinji apparently discloses that light led to a waveguide is refracted upward to form an image on the screen 5. That is, the waveguide plate 4 disclosed in Shinji does not "face a display panel" because it is a display panel.

Thus, Applicants submit that the teachings of Numao and Shinji are not combinable and would not produce the device of claim 2.

Accordingly, for at least these reasons, Applicants respectfully request that the Examiner withdraw the rejections of claims 2-5 over Numao, Weber, and Shinji.

Claims 6-9 and 12-14

Applicants respectfully traverse the rejections of claims 6-9 and 12-14 over Numao, Weber, Shinji and Nauta for at least the reason that the cited Nauta patent publication is not prior art.

The Nauta patent publication was published on 14 March 2002 based on an application filed on 31 August 2001. The U.S. filing date of the present application is also 31 August 2001, claiming priority from European Patent Application EP-00203129.2, filed on 11 September 2000. Therefore, the cited Nauta patent publication is not prior art for the present application.

Accordingly, Applicants respectfully request that the Examiner withdraw the rejections of claims 6-9 and 12-14 based on Numao, Weber, Shinji and Nauta.

CONCLUSION

In view of the foregoing explanations, Applicants respectfully request that the Examiner reconsider and reexamine the present application, allow claims 1-14 and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D.


Springer (Reg. No. 39,843) at (703) 715-0870 to discuss these matters.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment (except for the issue fee) to Deposit Account No. 50-0238 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17, particularly extension of time fees.

Respectfully submitted,

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